Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method, comprising:

dynamically partitioning-a an N-way set associative cache array dynamically in a sharing

mode at a first time based upon requests for memory from an integrated device having a plurality

of processors, wherein the integrated device includes a graphics processor and a central

processing unit; and

dynamically un-partitioning the N-way set associative cache array not in the sharing

mode at a second time.

2.   (Original) The method as claimed in claim 1, further comprising subdividing one or more

ways within the cache array.

3.   (Original) The method as claimed in claim 1, further comprising subdividing one or more

sets within the cache array.

4.   (Original) The method as claimed in claim 1, further comprising using a single least

recently used array to replace ways.

5.   (Original) The method as claimed in claim 1, further comprising applying a multiple

pseudo least recently used update based on an entry hit.

6.   (Currently Amended) The method as claimed in claim 1, further comprising dynamically

partitioning dynamically-the cache array into a direct-mapped cache.

7.   (Currently Amended) A device comprising:

a an N-way set associative cache memory array dynamically partitioned at a first time

when multiple memory requests are received from an integrated device having a plurality of

processors,

wherein the N-way set associative cache array is configured to be dynamically un-

partitioned at a second time, and

wherein the integrated device includes a graphics processor and a central processing unit.

8.   (Original) The device as claimed in claim 7 further comprising:

an integrated device having a plurality of processors connected to the cache memory

array.

9.   (Original) The device as claimed in claim 7 further comprising a main memory device

connected to the cache memory array.

10.   (Original) The device as claimed in claim 8 wherein the integrated device includes a

graphics processor and a central processing unit.

11.   (Currently Amended) A computer-readable medium having stored thereon a plurality of

instructions, said plurality of instructions when executed by a computer, cause said computer to

perform the method of:

dynamically partitioning a an N-way set associative cache array dynamically at a first

time based upon requests for memory from an integrated device having a plurality of processors,

wherein the integrated device includes a graphics processor and a central processing unit; and

dynamically un-partitioning the N-way set associative cache array at a second time.

12.   (Original) The computer-readable medium of claim 11 having stored thereon additional

instructions, said additional instructions when executed by a computer, cause said computer to

further perform the method of subdividing one or more ways within the cache array.

13.   (Original) The computer-readable medium of claim 11 having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of subdividing one or more sets within the cache array.

14.   (Original) The computer-readable medium of claim 11 having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of using a single least recently used array to replace ways.

15.   (Original) The computer-readable medium of claim 11 having stored thereon-additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of applying a multiple pseudo least recently used update based on an entry hit.

16.   (Currently Amended) The computer-readable medium of claim 11 having stored thereon-additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of dynamically partitioning ~~dynamically~~ the cache array into a direct-mapped cache.

17. – 21. (Cancelled)